

## IN THE CLAIMS

Following is a complete set of claims. No changes have been made to the claims.

1       1. (original) An apparatus for re-routing user connections between first and second  
2 nodes in a network switch, the apparatus comprising:

3           a loop-back path to provide connectivity between the first and second nodes, the first  
4 node having a primary connection and a secondary connection, the primary connection carrying  
5 the user connections during a normal mode; and

6           a switching element coupled to the loop-back path and the first node to switch the  
7 connectivity from the primary connection to the secondary connection when there is a failure  
8 condition at the primary connection.

1       2. (original) The apparatus of claim 1 wherein the loop-back path is one of a  
2 physical connection and a logical connection.

1       3. (original) The apparatus of claim 2 wherein the failure condition is detected by a  
2 network monitor.

1       4. (original) The apparatus of claim 3 further comprising:  
2           a re-route handler coupled to switching element to control the switching element based  
3 on a connectivity status between the first and second nodes, the connectivity status indicating the  
4 failure condition at the primary connection between the first and second nodes.

1       5. (original) The apparatus of claim 4 wherein the switching element switches the  
2 connectivity based on the connectivity status provided by the connectivity monitor.

1       6. (original) The apparatus of claim 5 wherein the secondary connection does not  
2 carry user connections during the normal mode.

1       7. (original) The apparatus of claim 6 wherein the network switch is an  
2 asynchronous transfer mode (ATM) switch.

1           8. (original) The apparatus of claim 7 wherein the primary and secondary  
2 connections correspond to a virtual path connection (VPC) in the ATM switch.

1           9. (original) The apparatus of claim 8 wherein the network monitor is one of an  
2 operations, administration, and maintenance (OAM) monitor and a call release procedure.

1           10. (original) The apparatus of claim 9 wherein the primary and secondary  
2 connections have equal connection capacity.

1           11. (original) A method for re-routing connections between first and second nodes in  
2 a network switch, the method comprising:

3           connecting the first and second nodes by a loop-back path, the first node having a  
4 primary connection and a secondary connection, the primary connection carrying user  
5 connections during a normal mode; and

6           switching the connectivity from the primary connection to the secondary connection by a  
7 switching element when there is a failure condition at the primary connection.

1           12. (original) The method of claim 11 wherein the loop-back path is one of a  
2 physical connection and a logical connection.

1           13. (original) The method of claim 12 wherein the failure condition is detected by a  
2 network monitor.

1           14. (original) The method of claim 13 further comprising:

2           controlling the switching element by a re-route handler based on a connectivity status  
3 between the first and second nodes provided by the network monitor, the connectivity status  
4 indicating the failure condition at the primary connection between the first and second nodes.

1           15. (original) The method of claim 14 wherein the switching element switches the  
2 connectivity based on the connectivity status provided by the network monitor

1        16. (original) The method of claim 15 wherein the secondary connection does not  
2 carry user connections during the normal mode.

1        17. (original) The method of claim 16 wherein the network switch is an  
2 asynchronous transfer mode (ATM) switch.

1        18. (original) The method of claim 17 wherein the primary and secondary  
2 connections correspond to a virtual path connection (VPC) in the ATM switch.

1        19. (original) The method of claim 18 wherein the network monitor is one of an  
2 operations, administration, and maintenance (OAM) monitor and a call release procedure.

1        20. (original) The method of claim 19 wherein the primary and secondary  
2 connections have equal connection capacity.

1        21. (original) A computer program product comprising:  
2              a computer usable medium having computer program code embodied therein for re-  
3              routing connections between first and second nodes in a network switch, the computer program  
4              product having:

5                  computer readable program code for connecting the first and second nodes by a  
6              loop-back path, the first node having a primary connection and a secondary connection,  
7              the primary connection carrying user connections during a normal mode; and

8                  computer readable program code for switching the connectivity from the primary  
9              connection to the secondary connection by a switching element when there is a failure  
10             condition at the primary connection.

1        22. (original) The computer program product of claim 21 wherein the loop-back path  
2 is one of a physical connection and a logical connection.

1        23. (original) The computer program product of claim 22 wherein the failure  
2 condition is detected by a network monitor.

1           24. (original) The computer program product of claim 23 further comprising:  
2           computer readable program code for controlling the switching element by a re-route  
3           handler based on a connectivity status between the first and second nodes provided by the  
4           network monitor, the connectivity status indicating the failure condition at the primary  
5           connection between the first and second nodes.

1           25. (original) The computer program product of claim 24 wherein the switching  
2           element switches the connectivity based on the connectivity status provided by the network  
3           monitor.

1           26. (original) The computer program product of claim 25 wherein the secondary  
2           connection does not carry user connections during the normal mode.

1           27. (original) The computer program product of claim 26 wherein the network switch  
2           is an asynchronous transfer mode (ATM) switch.

1           28. (original) The computer program product of claim 27 wherein the primary and  
2           secondary connections correspond to a virtual path connection (VPC) in the ATM switch.

1           29. (original) The computer program product of claim 28 wherein the network  
2           monitor is one of an operations, administration, and maintenance (OAM) monitor and a call  
3           release procedure.

1           30. (original) The computer program product of claim 29 wherein the primary and  
2           secondary connections have equal connection capacity.

1           31. (original) A system comprising:  
2           first and second nodes to carry user connections in a network switch; and  
3           a circuit coupled to the first and second nodes to re-route the user connections between  
4           first and second nodes, the circuit comprising:

5           a loop-back path to provide connectivity between the first and second nodes, the  
6        first node having a primary connection and a secondary connection, the primary  
7        connection carrying the user connections during a normal mode; and

8           a switching element coupled to the loop-back path and the first node to switch the  
9        connectivity from the primary connection to the secondary connection when there is a  
10      failure condition at the primary connection.

1        32. (original) The system of claim 31 wherein the loop-back path is one of a physical  
2        connection and a logical connection.

1        33. (original) The system of claim 32 wherein the failure condition is detected by a  
2        network monitor.

1        34. (original) The system of claim 33 wherein the circuit further comprises:  
2           a re-route handler coupled to the switching element to control the switching element  
3        based on a connectivity status between the first and second nodes, the connectivity status  
4        indicating the failure condition at the primary connection between the first and second nodes.

1        35. (original) The system of claim 34 wherein the switching element switches the  
2        connectivity based on the connectivity status provided by the network monitor.

1        36. (original) The system of claim 35 wherein the secondary connection does not  
2        carry user connections during the normal mode.

1        37. (original) The system of claim 36 wherein the network switch is an asynchronous  
2        transfer mode (ATM) switch.

1        38. (original) The system of claim 37 wherein the primary and secondary  
2        connections correspond to a virtual path connection (VPC) in the ATM switch.

1        39. (original) The system of claim 38 wherein the network monitor is one of an  
2        operations, administration, and maintenance (OAM) monitor and a call release procedure.

40. (original) The system of claim 39 wherein the primary and secondary connections have equal connection capacity.